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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,655

12/08/2003

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021756-005100US

4960

51206

7590

11/17/2006

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EXAMINER

BELL, CORY C

ART UNIT

PAPER NUMBER

2164

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,655

Applicant(s)

KARIMSETTY ET AL.

Examiner

Cory C. Bell

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/1/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-26 have been examined.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Response to Arguments

1. Any rejections not repeated in this office action have been withdrawn.
2. With regards to applicants traversal of the rejection of claims on the grounds that the usage of the term "unstructured data" is unclear. The examiner would like to note the follow from the September 1, 2006 reply:
 - a. "Applicants submit that one of ordinary skill in the art would understand the term "structured data" to mean information found in databases"
 - b. "Typically, the entire spectrum of data that is less structured than database entries is categorized under the term "Unstructured data."
 - c. "...which stores unstructured data that includes a well-formed XML document stored within a single table or column of a database...."
 - d. "While each XML document adheres to a single structure (e.g., a particular DTD) and is in one sense it thus structured data, the database column the XML document is stored in is unstructured in the sense that it can store XML data that adheres to a variety of DTDs and thus is not limited to storing data that adheres to a particular structure."

A contradiction between these definitions is clear. In (a) the applicant is correct, however the data as claimed is information found in a database, see c. Furthermore, the applicant exemplifies the deviation from what would have been understood by one of ordinary skill in the art in d. As it appears from the specification and the presented arguments, that the intended interpretation of "Unstructured data" could in fact have nothing to do with the structure of the document, but instead the database column have the ability to store xml data with different structures.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-26 are rejected under 35 USC 112 2nd paragraph.
5. Claims 1, 12, 19, and 26 contain "and/or" which causes the meets and bounds of the claim to be unclear.
6. The term "unstructured data" in **claims 4, 5, 6, 8, 15, 16, 22, and 23** renders the claim indefinite. The term "unstructured data " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term unstructured in this case refers to an XML document, which could be considered to be structured data. Furthermore, it appears from the applicants specification that this term may not be consistent with what would have been understood by one of ordinary skill in the art as it deviates from the common definition.

Claim Rejections - 35 USC § 101

Art Unit: 2164

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-26 are rejected under 35 USC 101 as failing to provide a useful, concrete, and tangible result. See MPEP 2106.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 7, 9-14, 18, 20, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Implementing Oracle Workflow, Published in 1999, Known hereafter as Mathieson in view of US 2001/0002485, known hereafter as Bisbee.

11. **Claim 1** is rejected for the following reasons:

Mathieson Teaches:

1. A method of committing a transaction to a database, the method comprising: initiating a database transaction; {Figure 3 "Start" } creating an electronic record that includes transaction data from the database transaction; {Figure 1 Shows that the record contains transaction data using the broadest reasonable interpretation } executing a rule associated with the record to determine whether an electronic signature is required to connote review and/or approval of the

Art Unit: 2164

electronic record, {Figures 3 and 5} wherein if execution of the rule results in a determination that an electronic signature is required, requesting the electronic signature prior to committing the transaction to the database. { Figure 3 End[Approved]}

However, Matieson fails to expressly disclose: End[Approved] resulting in committing the transaction to a database. This feature is taught by Bisbee, which teaches providing a separate database of a trusted 3rd party, which only accepts records (commits) after all business rules have been satisfied(See Paras 17, 169 and 104 and figure 6). Thus, it would have been obvious to one of ordinary skill in the art to combine the features of Bisbee with those of Matieson as Bisbee allows for reliable storage and record maintenance by a trusted 3rd party.

12. **Claim 2** is rejected for the following reasons:

2. The method of claim 1 wherein the electronic record comprises data generated from multiple tables of the database. {It would have been obvious to one of ordinary skill in the art the record to be stored in Bisbee would be generated from multiple table, as Matieson comprises multiple tables, and by incorporating the data from these tables would result in Bisbee Maintaining a complete record. }

13. **Claim 3** is rejected for the following reasons:

3. The method of claim 1 wherein the electronic record is stored in a common repository of electronic records that provides an audit trail that cannot be altered or disabled by users of the database. {Mathieson Figures 11 and 12, as well as, Bisbee, Paras 77, 78, and 106 all teach a

Art Unit: 2164

secure audit trail for the database objects, which inherently cannot be altered or disabled as it is used for proof of users signatures}

14. **Claim 7** is rejected for the following reasons:

7. The method of claim 1 further comprising the step of, if execution of the rule results in a determination that an electronic signature is required, displaying at least some of the transaction data in the electronic record on a computer display and requesting the electronic signature. {Mathieson Page 2 signature is applied to a field in the document, Bisbee Figure 9 item 926}

15. **Claim 9** is rejected for the following reasons:

9. The method of claim 1 further comprising obtaining and verifying the electronic signature, and thereafter, committing the database transaction to the database. {Mathieson Inherently must check to see if the password is correct see page 2, Bisbee Figure 7}

16. **Claim 10** is rejected for the following reasons:

10. The method of claim 1 wherein the rule requires a plurality of different electronic signatures and wherein, if execution of the rule results in a determination that a plurality of electronic signatures are required, requesting the plurality of electronic signatures prior to committing the data to the database. {Mathieson Figure 3, Bisbee Para 74}

Art Unit: 2164

17. **Claim 11** is rejected for the following reasons:

11. The method of claim 9 wherein, if the electronic signature is rejected or otherwise cannot be obtained, the transaction is rolled-back and not committed to the database. {it is inherent that the database manager would not allow a transaction to be committed wherein an electronic signature was rejected, which would result in a roll- back}

18. **Claim 12** is rejected for the following reasons:

12. A computer system that manages electronic records stored in a database, the computer system comprising: a processor{The system inherently has a processor}; a database{Bisbee Para 104}; and a computer-readable memory coupled to the processor, the computer-readable memory configured to store a computer program; wherein the processor is operative with the computer program to: {inherent features } (i) initiate a database transaction; (ii) create an electronic record that includes transaction data from the database transaction; and execute a rule associated with the record to determine whether an electronic signature is required to connote review and/or approval of the electronic record, wherein if execution of the rule results in a determination that an electronic signature is required, requesting the electronic signature prior to committing the transaction to the database. {See claim 1 rejection for italicized limitations.

19. **Claim 13** is rejected for the following reasons:

See claim 2 rejection.

Art Unit: 2164

20. **Claim 14** is rejected for the following reasons:

See claim 3 rejection.

21. **Claim 18** is rejected for the following reasons:

See claim 9 rejection.

22. **Claim 19** is rejected for the following reasons:

See claim 1 rejection.

23. **Claim 20** is rejected for the following reasons:

20. The computer program of claim 19 wherein the code for creating an electronic record creates electronic records in response to the occurrence of a predefined event. {Mathieson figures 2 and 3}

24. **Claim 21** is rejected for the following reasons:

See claim 3 rejection.

25. **Claim 25** is rejected for the following reasons:

See claim 9 rejection.

26. Claims 4- 6, 15-17, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathieson in view of Bisbee in further view of "Integrating XML and Databases" known hereafter as Bertino.

27. **Claims 4 and 5** are rejected for the following reasons:

Mathison fails to expressly disclose the use of XML Documents. Bisbee also teaches the objects being XML documents, para 71. Thus it would have been obvious to one of ordinary skill in the art to use XML as a well-known standard which provides the advantage of being easily supported. However, it is not expressly stated in the above mentioned references how the data is stored within the database. Bertino teaches the storage of an unstructured XML document as a column of a table as a CLOB datatype, page 86 col 1. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include these features as it provides an organized method for storing the objects.

Also note, "Oracle Workflow Release 2.6.2 Business Event System and PL/SQL Development Guidelines" teaches that Oracle Workflow typically uses XML Documents on page 15.

28. **Claim 6** is rejected for the following reasons:

6. The method of claim 5 wherein XML fields of the unstructured data are filled with the transaction data based on a predefined mapping of a data type definition to multiple data sources.

{See Bertino, The formatting of data into an XML file is inherently done using the mapping of a DTD to multiple data sources, as the DTD defines how data is mapped and related in the XML file}

29. **Claim 15** is rejected for the following reasons:

Art Unit: 2164

See claim 4 rejection.

30. **Claim 16** is rejected for the following reasons:

See claim 5 rejection.

31. **Claim 17** is rejected for the following reasons:

See claim 6 rejection.

32. **Claim 22** is rejected for the following reasons:

See claim 4 rejection.

33. **Claim 23** is rejected for the following reasons:

See claim 5 rejection.

34. **Claim 24** is rejected for the following reasons:

35. See claim 6 rejection.

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Mathieson in view of Bisbee in view of Official Notice.

36. **Claim 8**, as best understood, is rejected for the following reasons:

8. The method of claim 7 wherein the transaction data in the electronic record is displayed

Art Unit: 2164

according to a predefined layout set forth in an XSL style sheet and wherein the unstructured data further comprises a copy of the electronic record as displayed in a second column of the database table.

Bisbee teaches XML for formatting the data and having unstructured data that contains copies{Para 100}, but fails to expressly disclose how the data is presented to the user, and the data being stored in tables. The examiner takes official notice that the use of XSL to provide a layout for displaying XML documents was well known at the time of the invention, as was the ability to store data in tables. Thus it would have been obvious for one of ordinary skill in the art to do so a XSL is the language for determining XML document presentation and store data in tables. It is further noted by applicant not presenting a proper traversal of this official notice in the 9/1/2006 amendment it is now considered to be admitted prior art. See MPEP 2144.03.

37. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathieson in view of Bisbee in view Bertino and Official Notice.

38. **Claim 26** is rejected for the following reasons:

26. A method of committing a transaction to a database, the method comprising: automatically creating an electronic record including transaction data associated with the transaction in response to the occurrence of a predetermined event{See Claim 20 rejection}, wherein the electronic record comprises the transaction data stored as a well-formed XML document {See

Art Unit: 2164

claims 4 and 5 rejection} in a character large-object (CLOB) format of a column of a database table; storing the electronic record in a common repository of electronic records that provides an audit trail that cannot be altered or deleted by users of the system; {see claim 3 rejection} executing a rule associated with the electronic record to determine whether an electronic signature is required to connote review and/or approval of the electronic record; {see claim 1 rejection} and if execution of the rule results in a determination that an electronic signature is required, (i) displaying the transaction data in the electronic record according to a predefined layout set forth in an XSL style sheet associated with the electronic record and storing a copy of the transaction data as displayed in a character large-object (CLOB) format of a second column of the database table and (ii) requesting, obtaining and verifying the electronic signature prior to committing the transaction into a database. {See claim 9 rejection}

Bisbee teaches the objects being XML documents, Para 71, however it is not expressly stated how the data is stored within the database. Cheng teaches the storage of an XML document as a column of a table as a CLOB data type. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to include these features in the invention of Bisbee as it provides a organized method for storing the objects.

Bisbee also fails to teach the use of XSL for displaying XML documents. The examiner takes official notice that the use of XSL to provide a layout for displaying XML documents was well known at the time of the invention. Thus it would have been obvious for one of ordinary skill in the art to do so a XSL is the language for determining XML document presentation.

Art Unit: 2164

Bisbee para 33 teaches copies of the object being signed and stored and 106 teaches using versioning, however it fails to mention these documents being stored in a second column of a database table as a clob. The act of using a clob is discussed above, and the examiner takes official notice that it was well known in the art to store updated versions of a document in a table with a column for each version. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature, as it would provide organized structure to the objects.

It is further noted by applicant not presenting a proper traversal of this official notice in the 9/1/2006 amendment it is now considered to be admitted prior art. See MPEP 2144.03.

Conclusion

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7039805 teaches a system for digitally signing documents. Oracle "Questions & answer document for Oracle Appsword" teaches Oracle e-business 11i.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2164

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SAM RIMELL
PRIMARY EXAMINER